

REMARKS

The paper copy of the Substitute Sequence Listing for the subject application, is by this amendment, added after the last page of the application to replace the Sequence Listing previously filed on July 13, 2001.

From the paper dated September 26, 2001, it would appear that the prior submission of the Sequence Listing is objected to because SEQ ID NO:13 is allegedly not supported by the specification ("In other words, what SEQ ID NO:13 represents is not stated within the specification. . . ."). Additionally, the it would appear that the amendment to the claims canceling the text "SEQ ID NO:1" raised a second objection.

Applicants attempted to contact Examiner Hayes to clarify the points raised in the Official Communication. However, the recorded message indicated the Examiner was on vacation until November. Consequently, Applicants contacted Examiner Kunz on October 23, 2001 to clarify issues relating to the Official Communication. Based on information received from Examiner Kunz, Applicants have prepared the response to the two issues raised by the Examiner in the Official Communication.

First, regarding SEQ ID NO:13, Applicants have removed the sequence from the substitute Sequence Listing (both the paper and CRF forms) submitted herewith in order to be in compliance with the Official Communication. However, Applicants assert that there is support in the specification for the sequence represented by SEQ ID NO:13. As argued in the Amendment and Reply submitted April 6, 2001, SEQ ID NO:13 is a truncated form of SEQ ID NO:1. Support for the sequence can be found at least at page 22, line 21 to


page 23, line 19 and page 7, lines 4-18 as previously argued. Applicants reserve the right to pursue any subject matter canceled by amendment in a continuation.

Second, regarding the use of brackets around "SEQ ID NO:1", Applicants have amended claims 1 and 3 above to remove the brackets. Accordingly, by this amendment the objection raised in the Official Communication should be mooted.

In light of the above arguments and amendments, Applicants respectfully request favorable consideration on the merits. In the event that the Examiner has any issues remaining relating to this response, the Examiner is invited to contact the undersigned representative for Applicants at his convenience.

Respectfully submitted,

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Attachment to Amendment and Reply
Marked-up Claims 1 and 3

1. (Three Times Amended) An essentially purified neurotrophin of carp, carp NT-7 having neurotrophic activity and an amino acid sequence [[SEQ ID NO.:1]] as follows:

Lys Ala Asn Asp Phe Leu His Arg Gly Glu Tyr Ser Val Cys Asp
Ser Glu Glu His Trp Val Gly Asn Leu Thr Gln Ala Thr Asp Leu
Arg Gly Asn Glu Val Thr Val Leu Pro His Val Arg Ile Asn Asn
Val Val Lys Lys Gln Met Phe Tyr Glu Thr Thr Cys Arg Val Ser
Lys Pro Ile Gly Ala Pro Lys Pro Gly Gln Gly Val Ser Gly Val
Lys Ala Gly Thr Ser Ser Cys Arg Gly Ile Asp Asn Glu His Trp
Asn Ser Tyr Cys Thr Asn Val His Thr Phe Val Arg Ala Leu Thr
Ser Tyr Lys Asn Gln Ile Ala Trp Arg Phe Ile Arg Ile Asn Ala
Ala Cys Val Cys Val Leu Ser Arg Asn Ser Trp Arg His (SEQ ID NO.:1) or functional variants, analogues and functional fragments of NT-7.

3. (Twice Amended) A composition comprising an essentially purified neurotrophin of carp, carp NT-7 having neurotrophic activity and an amino acid sequence [[SEQ ID NO.:1]] as follows:

Lys Ala Asn Asp Phe Leu His Arg Gly Glu Tyr Ser Val Cys Asp
Ser Glu Glu His Trp Val Gly Asn Leu Thr Gln Ala Thr Asp Leu
Arg Gly Asn Glu Val Thr Val Leu Pro His Val Arg Ile Asn Asn
Val Val Lys Lys Gln Met Phe Tyr Glu Thr Thr Cys Arg Val Ser
Lys Pro Ile Gly Ala Pro Lys Pro Gly Gln Gly Val Ser Gly Val
Lys Ala Gly Thr Ser Ser Cys Arg Gly Ile Asp Asn Glu His Trp
Asn Ser Tyr Cys Thr Asn Val His Thr Phe Val Arg Ala Leu Thr
Ser Tyr Lys Asn Gln Ile Ala Trp Arg Phe Ile Arg Ile Asn Ala
Ala Cys Val Cys Val Leu Ser Arg Asn Ser Trp Arg His (SEQ ID NO.:1) or functional variants, analogues and functional fragments of NT-7.